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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/608,179 | 06/27/2003 | Eric Gouriou | 200206015-1 | 8205 |

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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

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| EXAMINER |
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CHAVIS, JOHN Q

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| ART UNIT | PAPER NUMBER |
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2193

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/608,179 | GOURIOU ET AL. | |
| | Examiner | Art Unit | |
| | John Chavis | 2193 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>06/27/06</u> | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. The claimed invention is directed to non-statutory subject matter. The claims (1-6) are considered non-statutory in that they are merely claiming non-functional descriptive material. For example, claim 1 specifies a “software tool”, which is considered a program, per se. Nothing in the preamble or the body of the claim indicates that a hardware component of any type is required. Furthermore, in the description of the software tool (in the body of the claim), the applicant claims logic configured to enable... This portion is considered to support the earlier statement that the claim consists of descriptive material; since, no functionality is imparted. Logic is considered a mere program, per se. The fact that the logic is configured does not indicate that it is being configured or provides a means for configuring. The feature is considered to merely describe a state that may previously exist. The phrase which specifies “to execute as if...” is also considered descriptive material that further defines the “logic configured to enable...” No other feature, step or component of the claim is considered to overcome the deficiencies of the descriptive portions cited above. The dependent claims inherit the defects of its respective parent claim; since, no portion of those claims is considered sufficient to overcome the defects of the parent.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Arnold et al. (2003/0106046).

We claim:

1. A software tool, comprising: logic configured to enable a child process that inherits the address space of an instrumented parent process to execute as if the child process was generated from an unaltered version of the address space when the child process inherits the altered address space of the parent process.

2. The software tool of claim 1, further comprising: logic configured to enable execution of the altered address space after the child process terminates.

3. The software tool of claim 2, wherein the logic configured to enable execution of the altered address space further comprises: a breakpoint store configured to receive a list of breakpoints inserted into the address space during instrumentation of the parent process; and

a backpatch engine configured to receive the list, the backpatch engine further configured to reinsert the breakpoints in

Arnold

See the title, abstract and sect. 0009, 0011, and 0018.

Also, see sect. 0029, which enables breakpoints to be dynamically loaded (as if an unaltered version...).

See claim 25.

See sect. 0044, 0049, 0057 and 0059-0061.

See sects. 0054-0055 and 0062.

the address space.

4. The software tool of claim 3, wherein the backpatch engine is responsive to an event indicative of termination of the child process.

See the rejection of claim 2.

5. The software tool of claim 1, wherein the logic configured to enable a child process that inherits the address space of a parent process to execute further comprises: a process image store configured to receive an original instruction bundle from the address space of the parent process when the original instruction bundle is altered with a breakpoint during binary instrumentation of the parent process; and a backpatch engine configured to receive the original instruction bundle and replace the breakpoint with the original instruction bundle in the address space.

See the rejections of claims 1-4.

6. The software tool of claim 5, wherein the backpatch engine is responsive to an event indicative of a breakpoint encountered during execution of the child process.

“ “ “ “

See the rejection of claim 1 in reference to claims 7 and 10.

Claim 8, 11-14, and 16 are rejected as claims 3.

As per claims 9 and 17, see the rejection of claim 4.

See claim 2 in reference to the rejection of claim 15.

Claims 18-19 are rejected as claim 5.

5. Claims 1, 7 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Ramasamy et al. (Dynamic Binary Implementation on IA-64).

Ramasamy teach the features of claims 1, 7 and 10 via the title, abstract and the section entitled "code patcher" on page 3. See also the portion entitled "function discovery" (item 2) under the section entitled Instrumentation system on page 2.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Chavis whose telephone number is (571) 272-3720. The examiner can normally be reached on M-F, 7:30am-4:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JC



John Chavis
Primary Examiner AU-2193